

Application Serial No.: 10/072,345
Attorney Docket No.: 0190142

In the Specification:

- Please amend paragraph 23, on page 7, lines 12-30, as follows:

The pixel values 111-116, 121-126, 131-136, 141-146, 151-156, 161-166, 211-216, 221-226, 231-236, 241-246, 251-256 and 261-266 of image_X 10 and image_Y 20 represent pixel values captured by successive readings of the pixel sensors 11-16, 21-26, 31-36, 41-46, 51-56 and 61-66 (Fig. 1). Each of the pixel sensors 11-16, 21-26, 31-36, 41-46, 51-56 and 61-66 captures a light value corresponding to a spot in a scene, or “view,” 200 to which the imaging array 100 is pointed. A complete image such as one represented by the pixel values 111-116, 121-126, 131-136, 141-146, 151-156, 161-166 typically takes 30 milliseconds (ms) to be transferred from the imaging array 100, through the ROBs 71-76, transmitted out the IMAGE_OUT signal 104 (Fig. 1) and stored in the memory 106. In this 30 ms time interval, the position of the imaging array 100 may shift a small distance with the result that the image_X 10 represents a slightly different frame than the image_Y 20. The techniques of the disclosed embodiment take advantage of this small difference between image_X 10 and image_Y 20 to produce a single image with a higher resolution than either image_X 10 or image_Y 20 alone. The position of image_X 10 with respect to image_Y 20 depends upon the amount the imaging array 100 has moved in the time interval between the two images 10 and 20. The time interval between the capture of image_X 10 and image_Y 20 may be between the minimum time necessary to read out an image from the imaging array 100, or 30 ms in this example, to a dynamically-determined or fixed interval of time, such as 100 ms.